

A Program Full of Bright Ideas for Kentucky

In 1883, at the Southern Exposition in Louisville, Thomas Edison unveiled the first electric light to the public. His invention forever changed the way we use energy. Almost 100 years later, Congress authorized the U.S. Department of Energy's (DOE) Weatherization Assistance Program (Weatherization) to help improve the way low-income families use energy. Weatherization reduces energy costs for low-income households by improving the energy efficiency of their homes, while ensuring their health and safety.

Home energy bills can be an overwhelming burden for low-income households. They typically spend 14% of their total annual income on energy bills, compared with 3.5% for other households. This burden can become unmanageable when energy prices soar.

The high energy burden on low-income families is a particular concern to Kentucky; the state is home to some of the poorest families in the United States. Weatherization reduces home energy consumption, which provides a permanent boost to the household's budget.

ILLUMINATING THE PATH TO ENERGY EFFICIENCY

The Department of Community Based Services administers the state's Weatherization Program and 24 local agencies provide services to eligible residents. Weatherization crews use an energy audit to determine the most cost-effective measures appropriate for each home. Diagnostic tools, like the blower door, manometer, and duct blaster, are used to identify and mitigate air infiltration and pressure imbalances. Crews conduct health and safety tests on appliances to check for carbon monoxide, an odorless, colorless gas, which can be deadly in large concentrations.

NATIONAL WEATHERIZATION PROGRAM

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| Homes weatherized in 1999 | 68,000 |
| DOE allocations in 1999 | \$135 million |
| Average annual energy cost savings per household | \$300 |
| Average space heating savings | 25-30% |
| Energy benefits returned for every \$1 invested | \$2.10 |
| Jobs supported | 7,000 |

KENTUCKY

| | |
|---|---------------|
| Homes weatherized in 1999 (with DOE \$) | 865 |
| DOE funding in 1999 | \$2.6 million |
| Clients served in 1999 | 3,200 |
| Elderly | 19% |
| People with disabilities | 28% |
| Families with children | 13% |

Typical weatherization measures include blowing insulation into floors, ceilings, and walls; evaluating and repairing heating systems; and sealing air leaks in doors and windows. Clients are also educated on the proper use and maintenance of the installed measures.

SPARKING SUCCESS

Kentucky leverages core DOE program funding to attract additional state and utility funding. The leveraging collaborations between the utilities and the Weatherization Program have become an important source of funding. In 1999, Kentucky leveraged over \$2.7 million, which allowed the state to weatherize an additional 1,000 homes.

Weatherization employs creative partnerships to enhance services. The Daniel Boone Development Council in Manchester is a successful venture that illustrates how Weatherization can help to improve existing housing stock. The venture pairs Weatherization with a housing reconstruction program that renovates decaying housing stock. By installing weatherization measures in the home, this rehabilitation effort makes the home both energy-efficient and more affordable.

BRILLIANT ARRAY OF BENEFITS

Weatherization produces significant economic benefits for low-income households. One elderly recipient in Louisville recounted her situation before receiving weatherization services: "All my money went to pay for food, gas, and the house payment. Most of the time I had no money left over to buy my medicine each month." Weatherization reduces energy costs and lessens the excessive financial burden on the families most in need, eliminating the difficult choice between food and fuel.

By reducing energy bills for low-income families, Weatherization keeps money in the local economy that would typically be exported out to pay for energy. Every \$1 retained in the community produces an estimated \$3 in multiplier benefits. The program also creates jobs for energy professionals. Currently, Kentucky employs more than 100 people to operate its Weatherization Program and additional jobs are created for subcontractors and material suppliers.



Weatherization technician encounters a common source of air infiltration.

RAY OF HOPE

When Belva Peters* became the primary caretaker for her two grandchildren, she knew that her \$716 Social Security payment could not cover all of the family's costs. Realizing the house was unfit for the children, she contacted the Jefferson County Community Development Program for help. After conducting an audit, the crew found

the roof was full of leaks, the water heater did not work, and the furnace was cracked and leaking carbon monoxide. As a result, Belva's roof and water heater were repaired and she received a new furnace. In a letter to the agency, Belva thanked the Weatherization staff for reminding her good things still happen for those in need.

WEATHERIZATION WORKS!

As Edison's lightbulb had a significant impact on the way people live, the Weatherization Program impacts the way people use energy. Weatherization measures decrease energy use by improving the energy efficiency of the home. Weatherizing a home yields substantial energy savings and economic and environmental benefits. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for Kentucky and America!

**Names have been changed to protect the privacy of the subjects.*

TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

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Visit the Weatherization Web site at: www.eren.doe.gov/buildings/weatherization_assistance
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732



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